

Date: Wednesday, 29/04/2009 3:03:00 PM
 User: Julie Dawson

Process Sheet

Split

Customer : CU-DAR001 Dart Helicopters Services	Drawing Name : WHEEL ASSEMBLY
Job Number : 47618 - 1	
Estimate Number : 12100	
P.O. Number :	Part Number : D3397041
This Issue : 29/04/2009 S.O. No. :	Drawing Number : D3397 REV.A
Prsht Rev. : NC	Project Number : N/A
First Issue : 1 / 1 Type : PURCHASED PARTS	Drawing Revision : A
Previous Run : 36529	Material :
Written By :	Due Date : 10/05/2009 Qty: 12 Um: Each
Checked & Approved By : <u>Julie Dawson</u>	
Comment : est rev. A new issue EC	

Additional Product

Job Number:



Seq. #:	Machine Or Operation:	Description :
1.0	OUTSIDE SERVICE	OUTSIDE SERVICES-ENGINEERING

**Comment:** Sub-Contracting PURCHASINGIssue P/O: 8698

Order Part #4997T28 from McMaster-Carr as per Dwg D3397

Ensure Certificate of Conformity is attached

C 209/04/30

(12)

2.0	D3397041	Wheel Assembly
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Comment: Qty.: 1.0000 Each(s)/Unit Total : 12.0000 Each(s)
 wheel ass'y

3.0	PACKAGING 1	PACKAGING RESOURCE #1
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**Comment:** PACKAGING RESOURCE #1

Receive & Inspect For Transit Damage

Ensure certificate of conformity is attached

P 29/04/4

(12)

4.0	QC6	DIMENSIONAL CHECK
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**Comment:** DIMENSIONAL CHECK

Ensure certification comply to Dwg D3397

S 09/05/05 (12)

5.0	LARGE FAB 1	LARGE FABRICATION RESOURCE 1
-----	-------------	------------------------------

**Comment:** LARGE FABRICATION RESOURCE 1

1-Remove retainers and bearing from wheel, do not damage retainers, discard bearing.

2-Ship retainers to machining

SAD 09-05-06 (12)

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Wednesday, 29/04/2009 3:03:00 PM
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Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: WHEEL ASSEMBLY

Job Number: 47618

Part Number: D3397041

Job Number:



Seq. #:

Machine Or Operation:

Description :

6.0

LATHE CONV.

CONVENTIONAL LATHE



Comment: CONVENTIONAL LATHE
1-Turn as per Dwg D3397

2-Deburr
IDENTIFY AS D3397-3

mf 09/05/06

(29)

7.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

SA 09/05/06

(29)

8.0

D33975

Sleeve



Comment: Qty.: 1.0000 (s)/Unit Total: 12.0000 (s)

Pick:

Qty Part number Description batch
1 D3397-5 sleeve

M36598 (1)

B47656 (5)

SAD 09-05-13

(6)

9.0

HK2820

Inventory



Comment: Qty.: 2.0000 Each(s)/Unit Total: 24.0000 Each(s)

Pick:

Qty Part number Description batch
2 HK2820 bearing

M111742 (4)

M110576 (8) SAD 09-05-07

(6)

10.0

LARGE FAB 1

LARGE FABRICATION RESOURCE 1



Comment: LARGE FABRICATION RESOURCE 1

1- Assemble bearing, sleeve and retainers as per dwg D3397

SAD 09-05-13

(6)

11.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

09/05/14

(46)

12.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and Stock

Location: *WA*

SAD 09-05-14

(6)

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Wednesday, 29/04/2009 3:03:00 PM
User: Julie Dawson

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: WHEEL ASSEMBLY

Job Number: 47618

Part Number: D3397041

Job Number:



Seq. #:

Machine Or Operation:

Description :

13.0

QC21

FINAL INSPECTION/W/O RELEASE



09/05/14

Comment: FINAL INSPECTION/W/O RELEASE

Job Completion



MF 09-05-14

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

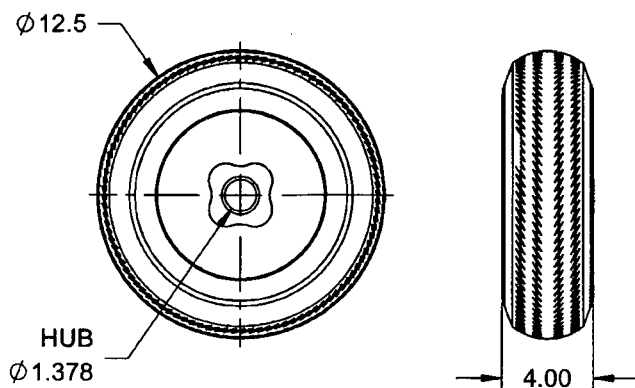
Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART

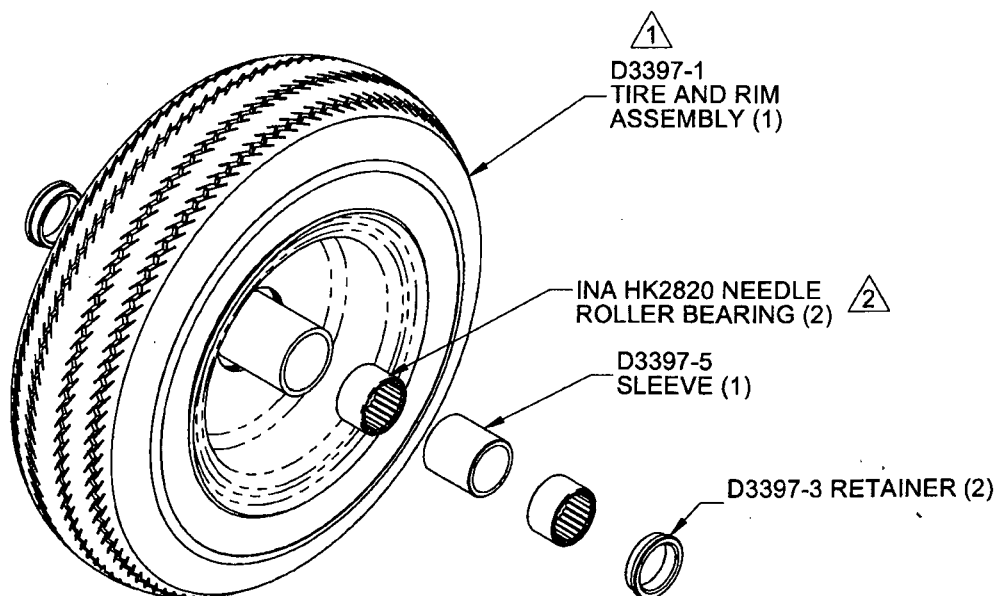
DESIGN RF	DRAWN BY RF	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>[Signature]</i>	APPROVED <i>[Signature]</i>	DRAWING NO. D3397	REV. A SHEET 1 OF 3
DATE 05.02.10	TITLE WHEEL ASSEMBLY		SCALE 1:8
A	05.02.10	NEW ISSUE	



WHEEL SPECIFICATIONS		
SIZE	MAXIMUM LOAD	MAXIMUM INFLATION LOAD
TIRE: $\phi 12.4 \times 4.1$ RIM: $\phi 6.0 \times 4.0$	445 LBS	50 PSI*

1 D3397-1 TIRE AND RIM ASS'Y

RELEASED
[Signature]



D3397-041 WHEEL ASS'Y

NOTES:

- 1) POSSIBLE SUPPLIER: McMASTER-CARR, P/N 4997T28. SCRAP ORIGINAL BEARING
- 2) POSSIBLE SUPPLIER: GENERAL BEARING
- 4) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 5) ALL DIMENSIONS ARE IN INCHES
- 6) INFLATE TIRE TO MAX. 50 psi
- 7) APPLY RUST INHIBITOR NOT PROTECTED BY PAINT. RUST INHIBITOR P/N: LPSC30316

SHOP COPY
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WITHOUT NOTICE
WORK ORDER
NO. *[Signature]*

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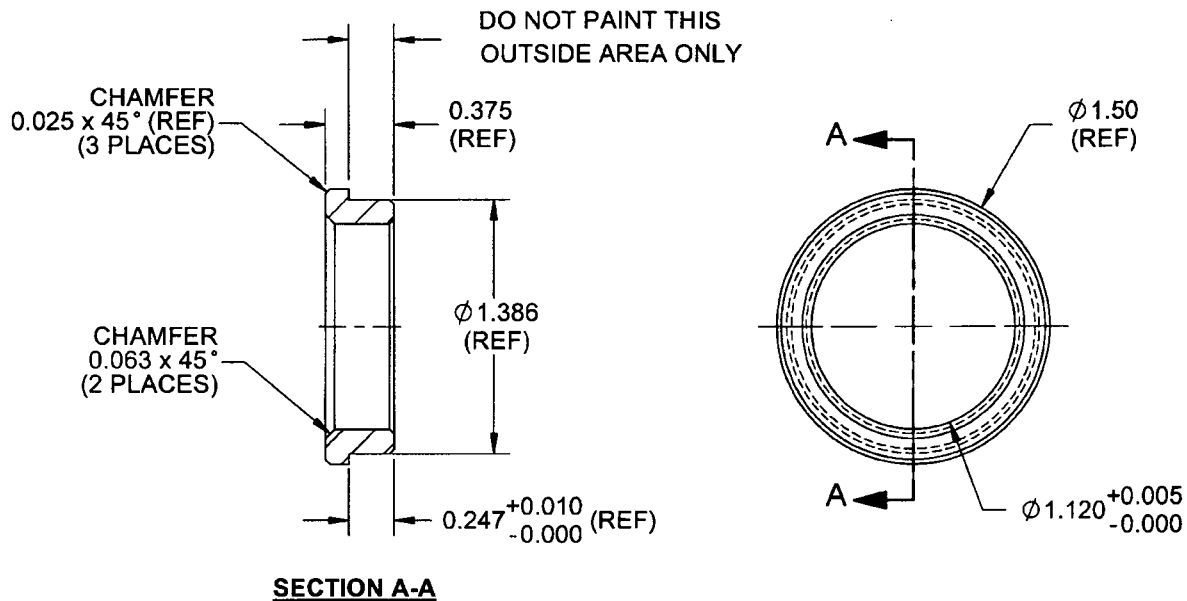
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CHECKED 3	APPROVED MC	DRAWING NO. D3397	REV. A SHEET 2 OF 3
DATE 05.02.10		TITLE WHEEL ASSEMBLY	SCALE 1:1

RELEASED
06/23/09

SPECIFICATION CONTROL DRAWING



D3397-3 RETAINER

NOTES:

- 1) MATERIAL: REMOVE FROM McMASTER-CARR P/N 4997T28 AND MODIFY AS SHOWN
- 2) FINISH: POWDER COAT FIRE RED (REF. 4.3.5.10) PER DART QSI 005 4.3
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES
- 5) BREAK ALL SHARP EDGES 0.005 TO 0.025

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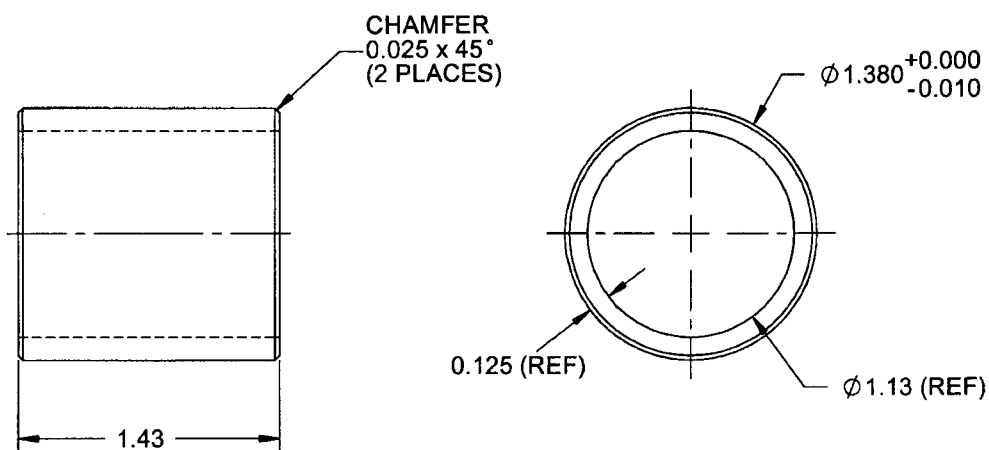
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CHECKED [Signature]	APPROVED [Signature]	DRAWING NO. D3397	REV. A SHEET 3 OF 3
DATE 05.02.10		TITLE WHEEL ASSEMBLY	SCALE 1:1

RELEASED
36/03/09

[Signature]

**D3397-5 SLEEVE****NOTES:**

- 1) MATERIAL: AISI 1020-1025 ROUND TUBING PER MIL-T-5066 OR ASTM A513-00
MT1020 SRA OR AMS 5075 OR AMS 5077, COLD DRAWN, SEAMLESS
(REF. DART SPEC. M1020TR1.375W.125)
- 2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 3) ALL DIMENSIONS ARE IN INCHES
- 4) BREAK ALL SHARP EDGES 0.010 TO 0.025

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WORK ORDER
NO. 47618

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DART

Purchase Order

Date Apr 30, 2009	Page 1
Purchase Order Number PO00008698	

Dart Aerospace Ltd
1270 Aberdeen St
Hawksbury, Ontario K6A 1K7
Phone: (613)632-9577
Fax: (613)632-1053

REVISED

Vendor Address:

McMaster-Carr Supply Co,
P.O. Box 7690
Chicago, IL 60680-7690
USA
Phone (330) 995-5500
Fax (330) 995-9600

Ship To:

Main Finished Goods Location
Dart Aerospace Ltd
1270 Aberdeen St
Hawksbury, Ontario K6A 1K7

Reference	Contact	Vendor Number	PO Date	Terms	Ship Via	Expected Arrival
		VU-MCM001	Apr 30, 2009	N30	Purolator	May 04, 2009

Qty. Ordered	Item Number	Description	Expected Arrival	Drop-Ship	Unit Cost	UOM	Extended Price
12.0000	2986A12 ✓	1/16 -6" LONG DRILL BIT	04/05/2009	No	3.200000		38.40
12.0000	2986A46 ✓	1/16- 12" LONG DRILL BIT	04/05/2009	No	8.400000		100.80
80.0000	8509A12 <i>Mcu 30</i>	BUSHING #30	04/05/2009	No	3.120000		249.60
80.0000	8509A31 ✓	LOCKRING	04/05/2009	No	1.600000		128.00
25.0000	8491A107 ✓	BUSHING 3/16	04/05/2009	No	5.380000		134.50
6.0000	8353T74	TIRE & RIM	04/05/2009	No	78.230000	Each	469.38
Comments: AS PER DWG D3233 REV. B B47607 MCMaster P/N: 8353T74							
12.0000	D3397041	Wheel Assembly	04/05/2009	No	44.840000	Each	538.08
Comments: AS PER DWG D3357 REV. A B47618 MCMaster P/N: 4997T28							
100.0000	92311A564 ✓	Set Screw	04/05/2009	No	0.241400	Each	24.14
Comments: AS PER DWG D3533 REV. B B47625 MCMaster P/N: 92311A564							
200.0000	92311A599	SET SCREW	04/05/2009	No	0.214000	Each	42.80
Comments: AS PER DWG D2712 REV. B B47603 MCMaster P/N: 92311A599							

CERTIFICATE OF CONFORMITY
REQ'D UPON DELIVERY

Comments:
PLEASE ADVISE PRICES

Tax Summary:

Entered By: *CY* CLAVOIE

Approved By: *W*

Less: included tax	0.00
Subtotal	1,725.70
Total tax	0.00
Total purchase order in USD Dollars	1,725.70

200 Aurora Industrial Parkway
Aurora OH 44202
330-995-5500
cle.sales@mcmaster.com

Dart Aerospace Ltd
1270 Aberdeen St
Hawkesbury ON K6A 1K7
Canada

Purchase Order
PO00008698

Page 1 of 2

McMaster-Carr Number
5744159-01

04/30/2009

Line	Description	Ordered	Shipped
3	8509A12 Removable Drill Bushing for Thin Gauge Material, 30 (.1285") ID, 3/8" OD, 3/8"-24 Thread Size	80 Each	✓ 30
4	8509A31 Lock Ring, 1/2" OD, for 8509a11-15, A41-42, Removable Drill Bushing for Thin Gauge Material	80 Each	✓ 80
5	8491A107 Steel Press-Fit Drill Bushing/Liner, 0.1875" (3/16") ID, 5/16" OD, 1/2" Length	25 Each	✓ 25
2	2986A46 Long-Length Short-Flute Twist Drill Bit, High-Speed-Steel, 1/16" Drill Size, 12" Overall Length, 7/8" L Flute	12 Each	✓ 12
1	2986A12 Long-Length Short-Flute Twist Drill Bit, High-Speed-Steel, 1/16" Drill Size, 6" Overall Length, 7/8" L Flute	12 Each	✓ 12
6	8353T74 Pneumatic Wheel with One-Piece Rim, 18" X 5.9" center Hub, 1-1/4" Axle, Roller Bearing, 1590#cap	6 Each	6
7	4997T28 Pneumatic Wheel with Two-Piece Rim, 12.4" X 3.6", Center Hub, 1" Axle, Roller Bearing, 440#cap	12 Each	12

LNS A7		
2 - 494 - 05	24 - 34 A12	30 EA 3
2 - 495 - 02	05 - 12 A31	80 EA 4
2 - 496 - 02	06 - 39 A107	25 EA 5
2 - 504 - 03	09 - 93 A46	12 EA 2
2 - 505 - 01	07 - 07 A12	12 EA 1
8 - 79		6
8 - 97		7

Dart Aerospace Ltd

Assembly
Area

7

Cycle

39

Shelf

1

Documents

4

EXP

194 lbs
9 lines

FW1WBP22
04/30/2009
12:43/13:07
538

YU1234010060

